



City and County of the City of Chester

ANNUAL REPORT

TO THE MAYOR, ALDERMEN AND
COUNCILLORS OF THE CITY AND
COUNTY OF THE CITY OF CHESTER

on the

HEALTH OF THE CITY
IN 1940

by

J. W. LOBBAN, M.A., M.D., D.P.H.
MEDICAL OFFICER OF HEALTH.



City and County of the City of Chester

ANNUAL REPORT

TO THE MAYOR, ALDERMEN AND
COUNCILLORS OF THE CITY AND
COUNTY OF THE CITY OF CHESTER

on the

HEALTH OF THE CITY
IN 1940

by

J. W. LOBBAN, M.A., M.D., D.P.H.
MEDICAL OFFICER OF HEALTH.

INDEX.

A	
Ambulance Facilities	PAGE 11
B	
Birth Rate	7
Blind Persons Act, 1920	31
C	
Chemical Examination of Milk	26
Cancer	32
Chester Royal Infirmary	15
City Hospital	15
Clinic and Treatment Centres	11
Closet Accommodation	25
City Hospital—Staff	5
D	
Dental Treatment	23
Drainage and Sewerage	25
Disinfestation of Verminous Persons, etc.	32
Death—Causes of and Ages at	33
F	
Food and Drugs (Adulteration) Act, 1938	26
G	
General Death Rate	9
H	
Health Visitors	22
Hospitals	14
Housing	26
I	
Infant Death Rate	8
Isolation Hospital	17
Institutional Treatment for Mothers, etc.	22
Institutional Treatment for Mentally Defective	20
Inspection and Supervision of Food	26
Infant Life Protection	22
L	
Laboratory Work	10
Local Government Act, 1929	20

INDEX.—*continued.***M****PAGE**

Midwives	21
Maternal Mortality	7
Milk (Special Designations) Order, 1936	27
Meat and other Foods	29
Midwifery and Maternity Services	20

N

Nursing in the Home	11
Notifiable Diseases during Year	30
Nursing Homes	23

O

Orthopaedic Treatment	23
Ophthalmia Neonatorum	31

P

Public Health (Prevention of Tuberculosis) Regulations, 1925 ...	32
Public Health Act, 1925, Section 66	31
Public Health Committee (1939-40)	4
Public Health Officers	4
Poor Law Medical Out-Relief	20
Prevalence and Control over Infectious Disease	30

S

Statistics	7
Still Births	7
School Clinic	12
Sanitary Circumstances of Area	23
Sanitary Inspection of Area	25
Slaughter of Animals Act	28

T

Tuberculosis, 1940	31
--------------------------	----

V

Vital Statistics	34
------------------------	----

W

Water	24
-------------	----

PUBLIC HEALTH COMMITTEE, 1939-40.

Chairman - - COUNCILLOR R. W. DUNN,
Deputy-Chairman - - COUNCILLOR E. E. ASHTON.

Members :

ALDERMAN A. S. DUTTON.	COUNCILLOR S. JANE DUNNE.
ALDERMAN F. D. PRICE.	COUNCILLOR EDITH H. BATY.
ALDERMAN CHARLES SCONCE.	COUNCILLOR R. MATTHEWS JONES.
COUNCILLOR ARTHUR CHARMLEY.	COUNCILLOR DAVID R. OWEN.
COUNCILLOR ALBERT DAVIES.	COUNCILLOR W. E. PYCRAFT.
COUNCILLOR T. M. HOOSON.	COUNCILLOR T. D. GILBRIDE.

The Mayor (COUNCILLOR KATE CLARKE) is an ex-officio member of all
Committees of the Council.

STAFF OF THE PUBLIC HEALTH DEPARTMENT.

Medical Officer of Health, School Medical Officer, Medical Superin- tendent, Corporation Hospitals, and Tuberculosis Officer.	J. W. Lobban, M.A., M.D., D.P.H.
Acting Deputy Medical Officer of Health and Deputy School Medi- cal Officer, etc.	Mary T. Place, M.B., Ch.B., D.P.H.
Chief Sanitary Inspector, Food In- spector, Factory Acts Supercision, etc.	*† S. H. Moore, F.S.I.A., F.R.S.I.
Additional Sanitary Inspector, Food Inspector, etc.	*† W. B. Calder, M.S.I.A., C.R.S.I.
Assistant District Inspector	H. J. Hewitt, M.S.I.A.
Housing Inspector	*M. G. H. Tresidder, C.R.S.I.
Public Abattoir Superintendent, etc.	*J. H. Withington, M.S.I.A.
Superintendent Health Visitor and Assistant Inspector of Midwives.	‡Miss M. H. Beattie, S.R.N., H.V.C.
Health Visitors	‡Miss L. Robson, A.R.San.I., M.I.H.
	‡Mrs. A. E. Austin, S.R.N.
	‡Miss Z. K. Wilkins, S.R.N., H.V.C.
	‡Miss M. A. Owen, S.R.N., H.V.C.
	‡Miss A. M. Ewing, S.R.N., H.C.V.
Chief Clerk	F. Thomas.
Assistant Clerk	§T. R. Blythe, A.M.S.I.A.
Temporary Assistant Clerk	Miss A. Turner.
Temporary Assistant Clerk (Part time, School Medical)	Miss M. Dodd.

PUBLIC HEALTH OFFICERS—continued.

Temporary Assistant Clerk (Part time, School Medical)	Miss D. M. Williams.
Matron, Isolation Hospital	Miss L. Taylor, S.R.N.

CITY HOSPITAL.

Consulting Surgeons	J. N. Adam, M.B., Ch.B., F.R.C.S.E. A. W. Holgate, M.S., F.R.C.S.
Consulting Physician	A. B. Paul, M.A., M.B., B.Ch.
Consulting Gynaecologist	J. G. Wigley, M.A., M.B., B.Ch., F.R.C.S.
Consulting Ear, Nose and Throat Surgeon	A. W. McCay, M.B., Ch.B., F.R.C.S.E.
Consulting Radiologist	D. Bruce Faulds, M.B., Ch.B., D.M.R.E.
Consulting Radiologist	R. F. Innes, M.B., Ch.B., D.M.R.E.
Consulting Orthopaedic Surgeon ...	G. T. Partridge, M.A., M.B., B.Ch., F.R.C.S.
Consulting Ophthalmic Surgeon ...	E. F. Wilson, M.B., B.Ch., B.A.O.
Consulting Dental Surgeon	E. N. Sterndale Bennett, L.D.S.
Senior Resident Medical Officer ...	H. A. Freeman, M.R.C.S.
Steward	E. Bennion.
Matron	Miss Moss.
Almoner	Miss Hyde.
Radiographer	Miss Pugh.

† Certificate, Royal Sanitary Institute, Meat and Food Inspection.

* Certificate, Liverpool University, Meat and Food Inspection.

§ Certificate, Liverpool University, Sanitary Science.

‡ Certificate, Central Midwives Board.

The following members of the Public Health staff are serving with H.M. Forces.*Deputy Medical Officer of Health—*

H. E. C. Sutton, M.B., Ch.B., D.P.H. : Major, R.A.M.C.

District Additional Sanitary Inspectors—

W. H. Wilkinson : 2nd Lieutenant, R.A.

G. E. Jarvis : Staff Sergeant, R.A.M.C.

Assistant Clerks—

J. Adamson : 2nd Lieutenant, R.A.

R. W. Hudson, Corporal, R.A.M.C.

C. Stoddard, Corporal, R.A.M.C.

Part-time Consulting Dental Surgeon, City Hospital—

E. N. Sterndale Bennett, L.D.S. : Lieutenant, Army Dental Corps.

To the Chairman and Members of the Public Health Committee.

Mr. Chairman, Ladies and Gentlemen,

I have the honour to present my report upon the health of the City in 1940. The vital statistics can be studied in detail in the report, but it is pleasing to single out the fact that no maternal death occurred during the year. The infant mortality rate shows a reduction from that of 1939, but is still higher than the average for England and Wales and smaller towns. The work of the City Hospital and Isolation Hospital have been well maintained. Members of the staff, permanent and temporary, have responded well to the increased volume of work, and I take this opportunity of paying tribute to their help during the year.

Those members of your staff who are serving in H.M. Forces are upholding the tradition of the department and the Corporation as will be seen from their promotions.

I am,

Your obedient Servant,

J. W. LOBBAN,

Medical Officer of Health.

CITY AND COUNTY OF THE CITY OF CHESTER.

STATISTICS.

Area in Acres	4,142
Civil Population (Registrar General) middle of 1940	46,960
Number of inhabited houses end of 1940 from Rate books	14,468
Rateable Value	£401,037
Sum represented by a penny rate	£1,582

The estimated population of the City middle of 1940, as estimated by the Registrar General, was 46,960.

BIRTHS.

	Male	Female,	Rate per 1,000 Population
Live Births—Legitimate	382	306 }	15.7
Illegitimate	19	30 }	
Still Births numbered 29. Rate 37.8 per 1,000 total births, or 0.61 per 1,000 population.			

DEATHS.

Deaths from diseases and accidents of pregnancy and parturition:—

	Deaths.	Rate per 1,000 Total Births
From sepsis	0	0.00
From other causes	0	0.00
	—	—
	—	—

Death Rates of Infants under one year of age:—

All infants per 1,000 live births	64.7
Legitimate infants per 1,000 legitimate births	63.5
Illegitimate infants per 1,000 illegitimate births	81.6

	Number.	Rate per 1,000 Population.
Deaths from Cancer (all ages)	83	1.7
Deaths from Measles (all ages)	5	0.11
Deaths from Whooping Cough (all ages)	2	0.04
Deaths from Diarrhoea (under 2 years)	4	0.08

THE BIRTH RATE.

The Birth Rate shows an increase of 0.1 from that of 1939, being 15.7, compared with 15.6 in 1939. The figures for the last five years with comparisons are as follows:—

	England and Wales.	Smaller Towns.	Chester.
1936	14.8	15.0	15.1
1937	14.9	15.3	14.7
1938	15.1	15.4	14.5
1939	15.0	15.6	15.6
1940	14.6	15.7	15.7

There were 29 still births in the City representing 37.8 per 1,000 total births or 0.61 per 1,000 population. For 1940 comparable figures are:—

1940	0.55	0.55	0.61 per 1,000 population
------	------	------	------------------------------

INFANT DEATH RATE.

There were 48 deaths of infants under one year of age, compared with 54 in 1939. This represents an infant death rate of 64.7 per 1,000 live births.

The causes of death were as follows:—

Prematurity	13
Pneumonia	9
Diarrhoea	4
Bronchitis	3
Diphtheria	1
Violence	1
Congenital malformations and birth injuries	9
Cerebro-spinal Fever	3
Measles	2
Other causes	3

Although the infant mortality rate shows a welcome decrease from 77.3 in 1939 to 64.7 in 1940, it is still above the average for smaller towns and for England and Wales. As will be seen from the accompanying table only on two occasions within the last ten years has Chester been below the average for the country as a whole. Every other year the rate for Chester has been higher than the average.

	England and Wales.	Smaller Towns.	Chester.
1931	66	62	68.5
1932	65	58	53.9
1933	64	56	67.7
1934	59	53	71.8
1935	57	55	75.8
1936	59	55	51.3
1937	55	58	59.6
1938	53	51	74.3
1939	50	40	77.3
1940	55	54	64.7

GENERAL DEATH RATE.

The deaths of Chester residents in 1940 numbered 681, representing a death rate of 15.2, compared with 13.8 in 1939.

346 deaths occurred in the age group 65 years and over, representing 50.8 per cent. of the total deaths, compared with 48.4 per cent. in 1939. Heart disease accounted for 157 deaths and other circulatory conditions for seven deaths. Pneumonia deaths numbered 50, Bronchitis was the cause of death in 61 cases and other respiratory diseases 26. The total number of deaths due to respiratory conditions was 137. Deaths from Cancer numbered 83, of which 41 were in the age group 65 years and over. Pulmonary Tuberculosis accounted for 24 deaths compared with 29 in 1939, and there were 7 deaths from Non-Pulmonary Tuberculosis compared with 8 in 1939.

The following deaths occurred in infectious disease cases:—
Measles 5, Scarlet Fever 0, Whooping Cough 2, Diphtheria 10, Influenza 13, Cerebro-spinal Fever 6.

Suicide accounted for 4 deaths, road traffic accidents for 10 deaths, and other violent causes for 21 deaths.

The comparison of Chester's death rate with the figures supplied by the Registrar General for England and Wales and smaller towns is as follows:—

	England and Wales.	Smaller Towns.	Chester.
1936	12.1	11.5	13.9
1937	12.4	11.9	14.7
1938	11.6	11.0	14.0
1939	12.1	11.2	13.8
1940	14.3	12.8	15.2

The death rate in Chester as will be seen from the figures for the last five years has been higher than the average for England and Wales and the smaller towns.

The City death rates from infectious diseases are shown in the following comparative statement:—

	England and Wales	Smaller Towns	Chester
Enteric Fever	0.00	0.00	0.00
Measles	0.02	0.02	0.11
Scarlet Fever	0.00	0.00	0.00
Whooping Cough	0.02	0.02	0.04
Diphtheria	0.06	0.05	0.21
Influenza	0.32	0.30	0.27
Diarrhoea (under 2 years) (per 1,000 births)	4.6	4.4	5.3

(a) LABORATORY SERVICES.

During the year arrangements were made with the Pathological Department, Royal Infirmary, Chester, for the examination of all specimens from the City and Isolation Hospitals and all specimens previously submitted to the Municipal Laboratory by general practitioners and any other Public Health specimens such as water, milk, etc. This scheme came into operation on 1st September, 1940. The following are the details of the arrangement:—

- (1) The Infirmary shall undertake the routine pathological work for the City Hospital, Isolation Hospital and the Public Health Department.
- (2) The Chester Corporation shall make an annual payment of £400 to the Infirmary for not more than 5,000 specimens and specimens over 5,000 shall be charged pro rata, and the Infirmary shall supply the necessary materials for the collection and transmission of specimens.
- (3) The Medical Officer and Health and the Pathologist will go through the quarterly returns of specimens each quarter and agree which of the specimens are properly to be included as coming under the heading of routine pathological work under (1) above.
- (4) Having regard to the volume of the work and the possibility of the need, as part of the pathological service, for visiting patients in either the City Hospital or the Isolation Hospital, the Infirmary shall appoint an Assistant Pathologist and maintain that appointment.
- (5) The Infirmary shall have the option of purchasing at an agreed price or at a valuation the laboratory equipment on condition that if at any time the arrangements come to an end, the Corporation shall have the right of re-purchasing their non-perishable and unbreakable laboratory equipment at an agreed price or at a valuation.
- (6) The arrangement shall continue for a trial period of four years commencing from the appointment of the Assistant Pathologist, and shall be determinable by the Council forthwith if any vacancy in that appointment is not or cannot be filled by the Infirmary within a period of three months.

From January 1st to 31st August, 2,305 specimens were examined at the Municipal Laboratory, and from 1st September to 31st December 1,708 specimens were examined at the Royal Infirmary, Chester.

(b) AMBULANCE FACILITIES.

No change.

(c) NURSING IN THE HOME.

No change.

(d) TREATMENT CENTRES AND CLINICS.

The following clinics are administered by the Local Authority :—

	Situation.	Accommodation.
1. Maternity and Child Welfare Clinic	Princess Street ...	Waiting room, weighing room, consulting room.
2. Maternity and Child Welfare Clinic	Curzon St., Saltney	Waiting and weighing room, consulting room
3. Ante-Natal Clinic	Princess Street ...	Waiting room, consulting room.
4. School Clinic (inspection) ...	„	„
5. School Clinic (treatment) ...	„	„
6. Ultra Violet Ray Clinic ...	„	„
7. Tuberculosis Clinic ...	2, King's Buildings	„
8. Venereal Disease Centre ...	Chester Royal Infirmary	Waiting, treatment and ablution room.

A Local Committee under the auspices of the British Red Cross Society and Order of St. John of Jerusalem administers the

9. Orthopædic after care Clinic	2, King's Buildings	Waiting room and consulting room.
---------------------------------	---------------------	-----------------------------------

MATERNITY AND CHILD WELFARE.

1. **Princess Street Clinic.**—Two sessions are held weekly and a medical officer, Dr. Williams, attends for consultation.

The babies and children under the age of five years are regularly weighed and records of progress kept.

When necessary children and mothers are seen by the Medical Officer.

The following attendances were made during the year :—

(b) by children under one year	2807
(b) by children between the ages of one and five years	1824
(c) by mothers	4030

(2) **Saltney Clinic.**—Dr. Place attends this clinic, which meets once weekly.

The following attendances were made during the year :—

(a) by children under one year	609
(b) by children between the ages of one and five years	604
(c) by mothers	931

The following were the consultations with the Medical Officer :—

	Princess St	Saltney.
First visits of children under one year	311	81
Subsequent visits	962	322
Children 1—5 years) first visits	72	15
Subsequent visits	595	461
Mothers (consultations)	30	23

A voluntary body—the Chester Infant Welfare Committee—have a rota of voluntary workers who attend these clinics and provide tea for the mothers. Infants' garments for necessitous cases are provided by this Committee and the work of the Committee is much appreciated.

(3) **Ante-Natal Clinic.**—The ante-natal clinic is held once a week under the charge of the Maternity and Child Welfare Medical Officer.

Expectant mothers are examined and advised, and the midwife interested in the case is written to if not present.

During the year the Medical Officer has seen 202 mothers who have paid 478 visits.

Cases were sent to Hospital if requiring special treatment, or if the home conditions were such as to contra ndicate home confinement.

Ante-natal and post-natal clinics are held at the City Hospital, details of which will be given later in the report.

(4) **The School Clinic (Inspection)** meets every School-day and is in charge of the Deputy School Medical Officer.

(5) **The School Clinic (Treatment)** meets on Tuesdays, Wednesdays and Fridays and is under the charge of the same medical officer.

(6) **Ultra Violet Ray Clinic.** This clinic is held on Tuesdays and Fridays.

(7) **The Tuberculosis Clinic** meets on Mondays and Thursdays at 11 a.m. and on Thursdays at 6 p.m.

The number of patients on the Dispensary register at the end of the year was	247
Number of new cases examined	97
Number of contacts examined	9
Number of attendances at the Dispensary	193
Number of attendances at Cheshire Joint Sanatorium for refills in artificial pneumothorax	77
Number of visits of tuberculosis officer to homes	34

Number of "T.B. plus" cases on the Register	78
Number of visits of nurses to tuberculous persons (including those under Tuberculosis Regulations)	957
Number of X-Ray examinations made	111

(8) **Venereal Diseases Centre.**—The following sessions are held:—

Monday (5—7 p.m.) female.
 Wednesday (5—7 p.m.) male.
 Thursday (5—7 p.m.) female.
 Saturday (12—2 p.m. male.

The clinic is open all day for irrigations, and trained assistants are in attendance.

The clinic is a joint one for Chester and the Counties of Cheshire and Flintshire.

The following is a table of the work done in 1940—

	Syphilis		Gonorrhœa.		Conditions other than Venereal.		Total.	
	M	F	M	F	M	F	M	F
Number of Cases at beginning of year	134	72	281	112	—	—	415	184
Number attending for first time 1940 ...	31	10	82	20	22	26	135	65
Ceased to attend or transferred to other centres	3	3	2	1	—	—	5	4
Discharged	1	4	41	6	11	11	53	21
Number under treatment at end of year	161	84	320	125	11	15	492	224

The following is the number of Chester patients attending during the year for the last five years:—

	1936	1937	1938	1939	1940
Syphilis	17	22	14	16	12
Gonorrhœa	45	28	52	54	35
Conditions other than venereal	6	8	11	5	13

The number of attendances made by Chester patients was 1,538.

(9) **The Orthopaedic After-Care Clinic** meets once a week when the cases are seen by the specialist staff of the Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry. During the year 194 cases were under treatment and they made 643 attendances.

The following are details of the cases :—

	On Books 1/1/40	Admitted during 1940	No Treated during 1940	Discharged during 1940	On Books 31-12/40	Attendances during 1940	
					Active Treat- ment	Appliance Super- vision	
Under 5 years ...	45	8	53	36	17	—	84
5—16 years ...	60	36	96	25	71	—	367
16 years and over ...	18	8	26	8	11	7	77
Tubercular Cases (all ages)	16	3	19	5	12	2	115
Totals ...	139	55	194	74	111	9	643

I have to thank most cordially once again the British Red Cross Society and the Order of St. John of Jerusalem whose enthusiasm and help combine to make a success of the clinic.

Much good work is done in after-care of cripples by the members of these societies.

During 1940 there were twenty Chester patients sent by the Maternity and Child Welfare and Education Committees and the Tuberculosis Officer to the Robert Jones and the Agnes Hunt Orthopaedic Hospital Oswestry, and five remained from 1939.

These patients spent 2,707 in-patient days in hospital.

The staff of the Hospital continue to co-operate with the Medical Staff of the Local Authority in the most helpful manner.

(c) HOSPITALS.

Name.	Situation.	Purpose.	No. of Available Beds	Pro- portion used by City Residents.	Management.
Chester Royal Infirmary	City ...	General ...	225	$\frac{1}{4}$	Voluntary Agency
City Hospital	City ...	General ...	228	$\frac{10}{20}$	Local Authority
Cheshire Joint Sanatorium	Market Drayton	Pulmonary Tuberculosis	250	$\frac{1}{30}$	Joint Committee
Robert Jones and Agnes Hunt Orthopaedic Hospital	Gobowen	Non-Pulmonary Tuberculosis and other crippling conditions	300	$\frac{1}{18}$	Voluntary Agency
Isolation Hospital ...	1 mile from centre of City	Infectious Diseases	68	$\frac{2}{3}$	Local Authority
Smallpox Hospital ...	" "	Smallpox ...	10	—	Local Authority
Cheshire Joint Board for Mentally Defective	Holmes Chapel	Mental Defectives	318	$\frac{1}{10}$	Joint Board
Liverpool Sanatorium	Delamere	Pulmonary Tuberculosis	175	$\frac{1}{18}$	Voluntary Agency

The location and amount of bed accommodation for various conditions is given where possible in the following table:—

			Chester Royal Infirmary.	City Hospital.	Isolation Hospital Chester.	Cheshire Joint Sanatorium	Liverpool Sanatorium Delamere	Cheshire Joint Board for the Mentally Defective	Robert Jones and Agnes Hunt Orthopaedic Hospital.
General Medical	...	M	16	32	—	—	—	—	—
"	...	F	16	16	—	—	—	—	—
General Surgical	...	M	52	14	—	—	—	—	—
"	...	F	32	10	—	—	—	—	—
Gynæcological	...	...	15	6	—	—	—	—	—
Children	...	...	26	40	—	—	—	—	—
Maternity	...	...	—	36	—	—	—	—	—
Venereal Diseases	...	M	4	—	—	—	—	—	—
"	...	F	4	—	—	—	—	—	—
Tuberculosis Pulmonary		M	—	—	—	4*	*6†	—	—
"	"	F	—	—	—	4*	*2†	—	—
"	" Children	...	—	—	—	—	*2†	—	—
Tuberculosis Non-Pulmon.		M	—	—	—	—	—	—	†
"	"	F	—	—	—	—	—	—	†
"	" Children	...	—	—	—	—	—	—	†
Chronic Sick	...	M	—	26	—	—	—	—	—
"	...	F	—	32	—	—	—	—	—
Orthopaedic	...	M	10	—†	—	—	—	—	†
"	...	F	6	—†	—	—	—	—	†
Ear, Nose and Throat		M	5	—†	—	—	—	—	—
"	...	F	5	—†	—	—	—	—	—
Ophthalmia Neonatorum	...	...	—†	—†	—	—	—	—	—
Ophthalmic	...	M	6	—†	—	—	—	—	—
"	...	F	6	—†	—	—	—	—	—
Infectious Diseases	...	...	—	—	66	—	—	—	—
Mental Defectives	...	M	—	—	—	—	—	12	—
"	...	F	—	—	—	—	—	20	—
Isolation Wards	...	...	—	10	—	—	—	—	—
Private Wards	...	...	22	—	—	—	—	—	—
Other	..	...	—	6	—	—	—	—	—

* Beds used by Chester County Borough.

† Beds given as required

‡ Extra Beds provided if necessary.

CHESTER CITY HOSPITAL.

The number of admissions, etc., has shown an increase.

The following statistics show the work done:—

	1936	1937	1938	1939	1940
Admissions	1529	1832	2017	2325	2469
Births	173	195	270	410	408
Discharges	1362	1578	1808	2059	2042
Surgical Operations	270	330	356	369	415

Statistics for the year ended 31st December, 1940:—

	1940	(1939)
Number of Admissions	2469	(2325)
Number of women confined in hospital	408	(404)
Number of live births	382	(378)
Number of still births	26	(32)
Number of maternal deaths	1	(nil)
Total number of deaths	234	(256)
Total number of discharges	2042	(2059)

Duration of stay—

(a) under four weeks	1792	(1665)
(b) four to thirteen weeks	485	(462)
(c) thirteen weeks and over	192	(188)

Average number of beds occupied	173	(170)
(a) highest	212 17/2/40	(198 11/3/39)
(b) lowest	73 31/8/40	(67 9/9/39)

Surgical operations under general anaesthetic	415	(369)
Number of abdominal sections	125	(91)
Total number of patients X-rayed, 832.		
Total number of films taken, 1713.		

During the year the building previously used as the night nurses' quarters was altered to provide twenty-six beds for male chronic cases.

Ante-natal and post-natal clinics are held at the Hospital in connection with the Maternity Department.

Statistics of Ante-Natal and Post-Natal Clinics.

Ante-natal Clinic—

	No. of Patients	No. of Attendances
City Expectant Mothers	280	1567
County Expectant Mothers	168	539
Other Expectant Mothers	5	34
Total	453	2140

Post-natal Clinic—

City Patients	77	77
County Patients	30	32
Total	107	109

Of the City patients attending the ante-natal clinic during the year, 233 were new bookings during 1940; the remainder (47) having first attended in 1939. Of the County patients 151 booked during 1940, and 17 first attended in 1939.

ISOLATION HOSPITAL.

The Isolation Hospital had a busy year. On January 1st, 1940, 73 patients were in hospital and 623 patients were admitted during the year. The increase of admissions compared with 1939 was 171. There remained in hospital on January 1st, 1941, 58 patients. The total number of patients admitted from the City of Chester was 383, while the remaining 240 were admitted from other authorities.

Scarlet Fever.

The total number of admissions to the Scarlet Fever Ward was 112, of which 76 were City cases. Six cases were complicated by Measles, one by Meningitis, and two by Chicken Pox. There were no deaths in uncomplicated Scarlet Fever Cases, but one death occurred in the group of Scarlet Fever and Measles.

Diphtheria.

The total number of admissions to the Diphtheria Wards during the year was 264. These admissions may be sub-divided as follows:—

	City.	Other.	Total.
True faucial diphtheria	142	41	183
Nasal diphtheria	4	2	6
Diphtheria contacts (positive swabs)	12	2	14
Diphtheria carriers	10	3	13
Diphtheria and Measles	5	2	7
Diphtheritic conjunctivitis	1	—	1
Otitis media (positive swab)...	4	—	4
Diphtheria and Scarlet Fever	1	—	1
Diphtheria and Chicken Pox ...	3	—	3
Tonsillitis	18	8	26
Bronchopneumonia and Tonsillitis	2	—	2
Croup	1	1	2
Septic pharyngitis	1	—	1
Stomatitis and pharyngitis	—	1	1
	204	60	264

Deaths numbered thirteen, of whom ten were from the City of Chester. Fuller details of the deaths will be found later in the report. Many of the cases admitted were of the more serious type with bull neck and marked toxæmia. It was noticeable that adults figured more prominently in the admissions than usual. Eight cases were admitted of children previously immunised against diphtheria. Six were very mild and two moderately serious.

Cerebro-spinal Fever.

During the year 57 cases of cerebro-spinal fever were treated and thirteen were admitted as suspect and were re-diagnosed as other conditions, e.g., tubercular meningitis, influenza, rheumatism, etc.

Of the 57 cases there were four deaths.

During the War, 1914-1918, for the general population in England, the case fatality was about 64 per cent., although many of the cases must have had serum. Following the introduction of the sulphonamides for treatment, particularly M. & B. 693, the results of treatment have been splendid. Several cases admitted were unconscious and the prognosis formerly would have been grave.

The number of deaths—four—compares very favourably with what one had to expect, even with intensive serum treatment.

The recovery in all cases was unattended by sequelæ.

No cases of chronic meningitis have been seen as used to be frequently found prior to this new form of treatment.

Admissions of other infectious diseases were as follows:—

Rubella, 50; Measles, 50; Scabies, 34; Chicken Pox, 8; Whooping Cough, 12; Mumps, 4; Paratyphoid Fever, 4; Erysipelas, 7.

The following table gives details of the admissions:—

1940.	Scarlet Fever.	Diph- theria.	Para- typhoid Fever.	Rubella.	Tonsil- litis.	Measles	Ery- sipelas.	Cerebro Spinal Fever	Other Con- ditions.	Total.
Chester ...	76	182	1	7	11	39	5	26	41	383
Tarvin ...	...	22	2	...	...	...	...	2	3	29
Hoole ...	23	17	1	1	...	...	...	6	1	49
Hawarden ...	...	...	...	...	1	...	...	9	4	14
Flint ...	6	...	...	...	...	...	...	1	1	8
Military ...	...	...	...	...	...	...	...	...	...	...
Other ...	7	11	...	42	...	16	2	13	49	140
Total ...	112	232	4	50	12	55	7	57	99	623

The number of patients discharged during the year was 610 and the number of deaths 28. The following is a detailed statement of the causes of death:—

	City.	Other.	Total
Diphtheria	10	3	13
Cerebro-spinal Fever	—	4	4
Tubercular Meningitis	—	2	2
Pneumococcal Meningitis	—	2	2
Basal Subarachnoid Haemorrhage	1	—	1
Measles and Broncho-pneumonia	2	—	2
Lobar Pneumonia and Pneumococcal Meningitis	—	1	1
Measles collapse of lung	1	—	1
Broncho-pneumonia and Septic Tonsillitis	1	—	1
Whooping Cough and Convulsions	1	—	1
	16	12	28

Further details of the deaths from Diphtheria are as follows:—

1. Male, 3 years—ill for one week prior to admission. died within 24 hours of admission.
2. Male, 5 years—admitted third day of disease, died of heart failure within 24 hours of admission.
3. Female, 5 years—admitted on third day of disease, extensive disease, very toxic, died a week after admission.
4. Female, 5 years—admitted on fourth day of disease, very toxic, died eight days after admission.
5. Male, 1 year 8 months—very toxic, admitted with signs of heart failure; had operation for cleft palate and hare-lip some time prior to admission—died within a few hours.
6. Male, 3½ years—extensive disease with laryngeal involvement, died of heart failure 36 hours after admission.
7. Female, 7½ years—died of secondary heart failure and paralysis in the seventh week after admission.
8. Male, 4 years—widespread membrane, very toxic, died 24 hours after admission.
9. Male, 2 years—died a few hours after admission, sudden heart failure.
10. Male, 5 years, haemorrhagic case, died on sixth day after admission.
11. Female, 3 years—admitted on fourth day of disease, very toxic, extensive membrane, died 36 hours after admission.

12. Female, 3 years—extensive membrane, child toxic, died within 24 hours of admission.
13. Male, 6 weeks—child was suffering from marasmus and diphtheria bacilli were found in nasal swab; died 2 weeks after admission.

(1) LOCAL GOVERNMENT ACT, 1929.

No further step has been taken to make a declaration under this Act.

(2) POOR LAW MEDICAL OUT-RELIEF.

No change has taken place in this service.

(3) INSTITUTIONAL PROVISION FOR THE CARE OF
MENTAL DEFECTIVES.

The total accommodation available for Chester patients in Cranage Hall is as follows:—

High Grade female	18
High Grade male	10
Lowest Grade female	2
Lowest Grade male	2
Total	<u>32</u>

In addition there are Chester cases in various Institution in the country awaiting transfer to Cranage Hall when more accommodation is available. Details are as follows:—

	Male.	Female.
Stoke Park, Bristol	1	2
Moss Side State	3	2
Gillibrand Hall, Chorley	—	1
St. Teresa's, Lewisham	—	1
Allerton Priory	—	1
Ashton House, Birkenhead	—	1
Royal Albert, Lancaster	2	—
Newtown and Llanidloes	2	—
Brentry Colony	1	—
The Mary Denby, Sandlebridge	1	—
Forden Certified Institution	2	—
	<u>12</u>	<u>8</u>

3. (1) MIDWIFERY AND MATERNITY SERVICES.

City Hospital Maternity Unit.

The number of women confined in hospital during the year was 408. The number of women admitted for ante-natal treatment was 76.

Cases of puerperal pyrexia numbered four.

One maternal death occurred and was due to pulmonary embolism following labour.

There were twenty-six still births and ten children died within ten days of birth.

The cause of death was as follows:—

Prematurity, 7.

Asphyxia neonatorum, 2.

Cerebral haemorrhage, 1.

Details of attendances at the ante-natal and post-natal clinics have been given earlier in the report.

Municipal Midwifery Service.

There are five municipal midwives employed by the Corporation. During the year they attended 297 cases as midwives and 59 cases as maternity nurses.

Under the provisions of the Midwives Act the Local Authority paid the whole or part of the doctor's fee when called in an emergency by the midwife in 87 cases, a decrease of 7 from last year.

Artificial Feeding. Ten notifications were received during the year.

Total number of births notified	1090
Cases attended and delivered by doctors	61
Cases attended in nursing homes	212
Cases attended and delivered by midwives ...	300
Cases attended in hospitals	517
Number of still births	47

Of the 300 births attended by midwives, in 95 cases some condition arose requiring the calling in of medical help either for the mother or infant. This is a decrease of one from last year.

The reasons for requiring help were as follows:—

Feebleness of child	1
Prolonged labour or malpresentation	24
Complications before labour	7
Complications during labour	7
Complications after labour	3
Rise of temperature	5
Discharge from the eyes	8
Lacerated perinaeum	27

Abortion	6
Prematurity	4
Skin eruption	1
Abnormality of child	2

(iii) INSTITUTIONAL PROVISION FOR MOTHERS AND CHILDREN.

The accommodation at the City Hospital is adequate for the needs of the City.

During the year accommodation was available for healthy children up to the age of three years in the Public Assistance Institution, and over three years such children are accommodated in the Children's Home, Wrexham Road, Chester.

Marasmic and ailing babies are admitted to the Children's Ward at the City Hospital.

(iv) HEALTH VISITORS.

The number of health visitors is six.

The health visitors made the following visits:—

Primary Births Visits	810
Return Visits	4275
Visits to Children (1—5 years)	10953
Visits to Expectant Mothers	720
Other Visits	2003
Visits to Midwives	18

The visits to cases of tuberculosis are shown elsewhere in the report.

(v) INFANT LIFE PROTECTION (CHILDREN AND YOUNG PERSONS ACT, 1932).

This Act is administered by the Maternity and Child Welfare Sub-Committee of the Public Health Committee.

The register is kept in the Public Health Department where all notifications are sent.

The number of children on the register at the end of the year was twelve.

DENTAL TREATMENT.

Dental treatment was provided for nursing and expectant mothers. The treatment is either free, or subject to part payment, according to the means of the family.

Twelve cases were treated during the year.

Children under five are treated at the School Dental Clinic.

ORTHOPAEDIC TREATMENT.

As in former years this has been carried out by the Orthopaedic After-Care Committee and the Robert Jones and Agnes Hunt Orthopaedic Hospital, Oswestry. Fuller details of this work will be found elsewhere in the report.

NURSING HOMES.

The number of nursing homes registered at the end of 1940 was six.

The following table gives particulars:—

	Number of Homes	Number of Patients provided for:		Total
		Maternity	Other	
Homes first registered during year ...	—	—	—	—
Homes on register at the end of the year	6	13 definite plus unallocated number	26	39

Inspections were made during the year.

SANITARY CIRCUMSTANCES OF THE AREA.

WATER.

The City water supply is obtained through the Chester Waterworks Company. The water is derived from the River Dee and subsequently filtered and chlorinated at the Company's works. The standard of purity—absence of *Bacillus Coli* in 100 c.c.'s of the water as supplied to the consumer—has been maintained throughout the year.

Bacteriological examinations of the water supply, including water from various filter beds, have been carried out twice every month. In addition chemical analyses have been carried out by the Public Analyst every month, and the following table gives the results of these analyses.

DRAINAGE AND SEWERAGE.

The construction of main sewers in Blacon was completed during 1940. There remains a small portion of the area where a sewer is required.

CLOSET ACCOMMODATION.

As the sewers were being completed through the roadways in Blacon, adjoining property owners immediately put in hand the work of connecting their houses with the sewers. 110 houses were so drained and their cess-pools abolished. The work proceeded very satisfactorily and there remain very few pail closets to be converted.

SANITARY INSPECTION OF THE AREA.

The following is a classified statement of the work done in the Sanitary Department during the year:—

Complaints in respect of nuisances	372
Visits in respect of nuisances	2809
Rooms disinfected after infectious diseases	265
Rooms disinfected for other purposes	46
Investigations into infectious diseases	347
Tests applied to drains	609
Ashbins provided	76
Inspection of Schools	161
Inspection of Canal Boats	31
Inspections of Factories	374
Inspections of Dairies, Cowsheds and Milkshops	256
Inspections of Butchers' shops	1252
Inspections of Fishmongers' shops	811
Inspections of other food shops	1977
Inspections of Offensive Trade premises	45
Inspections of Caravans	16
Visits to Common Lodging Houses	35
Dwellings, Inspections and Re-inspections	3817
Visits in respect of Rat Nuisances	1371
Visits of Licensed Victuallers Premises	44
Visits under Shops Act, 1934	96

The following notices were served for the abatement of nuisances:—

Intimation	468
Statutory	15

HOUSING.

Houses made reasonably fit for habitation by informal action—16.

Houses demolished in Clearance Areas—26.

FOOD AND DRUGS ACT, 1938.

ANALYSES.

Article.	Number Examined			No. Adulterated, &c.		
	Formal	In-formal	Total	Formal	In-formal	Total
Milk	70	2	72	8	—	8
Jams	1	3	4	—	1	1
Medicated Sweets	1	6	7	1	—	1
Marmalade	—	2	2	—	—	—
Milk Powder	—	1	1	—	—	—
Flour (Plain)	—	4	4	—	—	—
Flour (Self-raising)	—	4	4	—	—	—
Barley	—	2	2	—	—	—
Rice	—	2	2	—	—	—
Tapioca	—	2	2	—	—	—
Pepper	—	2	2	—	—	—
Bread	—	2	2	—	—	—
Bread and Butter	1	—	1	1	—	1
Margarine	—	3	3	—	—	—
Condensed Milk	—	3	3	—	—	—
Peas	—	3	3	—	—	—
Fish Paste	—	2	2	—	—	—
Cream	—	2	2	—	—	—
Tea	—	4	4	—	—	—
Cocoa	—	4	4	—	—	—
Coffee	—	4	4	—	—	—
Dried Milk	—	2	2	—	1	1
Ice Cream	—	4	4	—	—	—
Sausages	4	2	6	—	—	—
Liquid Paraffin	—	1	1	—	—	—
Aspirin Tablets	—	2	2	—	—	—
Glycerine	—	2	2	—	—	—
Castor Oil	—	1	1	—	—	—
Custard Powder	—	2	2	—	—	—
Sweets	—	1	1	—	—	—
Whisky	2	—	2	—	—	—
Rum	2	—	2	—	—	—
Sherry	2	—	2	—	—	—
Gin	2	—	2	—	—	—
Beer	—	6	6	—	—	—
Water Sterilizing Fluid	—	1	1	—	—	—
Total	85	81	166	10	2	12

Milk.

Total samples analysed, 72.

Number of samples below standard (Fat, 3%; Solids not fat, 8.5%) 8, or 11%.

Averages (72 samples)—Fat, 3.6% ; Solids not fat, 8.6%.

The circumstances relating to samples certified to be "not genuine" are set out in the following schedule of administrative action :—

No of Sample	Article.	Result of Analysis.	Action taken.
1	Iodine and Black-currant Pastilles.	Contained only 0.0026% Iodine or 1/2000th grain in each pastille.	Attention of vendor called to result of analysis.
5	Jam (Raspberry). (Informal)	8% deficient in fruit content.	Nil—Formal sample, "following up", genuine.
12	Milk.	5% deficient in fat.	Nil—"Appeal to Cow" sample below standard.
19	Milk.	8% deficient in fat.	} Warning letters sent to producers and retailers.
20	Milk.	10% deficient in fat.	
21	Milk.	11% deficient in fat.	
23	Milk.	Slightly below for fat.	
22	Milk.	7% added water.	Legal proceedings. Case dismissed.
43	Milk.	5% deficient in fat.	No action. "Appeal to cow" sample below standard.
45	Bread and Butter.	20% margarine.	Legal proceedings. Fined £1 and costs.
81	Dried Milk. (Informal)	1.7% deficient in fat.	Attention of retailer called to result of analysis.
125	Milk.	8% deficient in fat.	Legal proceedings. Case dismissed.

MILK (SPECIAL DESIGNATIONS) ORDER, 1936 and 1938.

The following licences were issued during the year :—

Producers' Licences—"Accredited"	7
Pasteuriser's Licence	1

Supplementary Licences to Sell :—

"Certified" Milk	3
"Accredited" Milk	2
"Pasteurised" Milk	1

EXAMINATION OF MILK FOR TUBERCULOSIS.

During the year sixteen samples were submitted to the Pathological Department, Chester Royal Infirmary. Of these two (or 12.5 per cent.) proved to contain tubercle bacilli. The positive cases were from farms outside the City. Results of the tests were forwarded to the appropriate officers and subsequent reports showed successful action had been taken to eliminate the affected animals.

WHOLESALE DEALERS IN MARGARINE.

One name was added to the Register of wholesale dealers in margarine under Section 34 of the Food and Drugs Act, 1938.

SLAUGHTER OF ANIMALS ACT, 1933.

The following "licences to slaughter" were issued:—

New Licences	1
Renewal Licences	32

Slaughtering in the City.

During the year there were slaughtered at the Public Abattoir 3072 cattle, 1,414 calves, 19,644 sheep, 4,730 pigs; Total 28,860.

FOOD INSPECTION.

For the purpose of food inspection the following visits were made to:—

Butchers' shops	1252
Fishmongers' shops	811
Other food shops, stores, etc.	1977
	<hr/>
	4040
	<hr/>

Unsound Food.

Article				No.	Reason for condemnation.	
BEEF*						
Carcases and offal	...	...	...	130	Generalised tuberculosis.	
"	"	...	...	20	Febrility.	
"	"	...	...	4	Oedema.	
"	"	...	...	2	Pyæmia.	
"	"	...	...	2	Extensive contusion.	
"	"	...	...	1	Septicæmia.	
Portion of carcases (quarters)	...	...	...	36	Localised tuberculosis.	
"	"	...	...	3	Extensive contusion.	
VEAL.						
Carcases and offal	...	...	...	14	Febrility.	
"	"	...	...	6	Umbilical pyæmia.	
"	"	...	...	3	Immaturity.	
"	"	...	...	2	Gongenital tuberculosis.	
PORK.						
Carcases and offal	...	...	...	53	Generalised tuberculosis.	
"	"	...	...	49	Febrility.	
"	"	...	...	6	Jaundice.	
"	"	...	...	2	Oedema.	
"	"	...	...	1	Pyæmia.	
MUTTON						
Carcases and offal	...	...	...	17	Febrility.	
"	"	...	...	19	Oedema.	
"	"	...	...	1	Pyæmia.	
VISCERA & ORGANS (lbs.)				33556	Localised tuberculosis, parasitic and other conditions.	
MISCELLANEOUS.						
Imported Beef (lbs.)	...	...	...	1349	Bone taint, etc.	
Imported Oxtails (lbs.)	...	...	...	60	Decomposition.	
Imported Ox Kidneys (lbs.)	...	...	...	45	Decomposition.	
Imported Lambs (carcasses)	...	...	...	11	Black spot.	
Imported Sweetbreads (lbs.)	...	...	...	60	Decomposed.	
Bacon (lbs.)	...	...	...	640	Decomposed or otherwise unfit.	
Smoked Pigs' Cheeks (lbs.)	...	...	...	42	do.	do.
Dressed Chickens (lbs.)	...	...	...	116	do.	do.
11 tins Whole Chicken	...	...	...	11	do.	do.
Sausages (lbs.)	...	...	...	127	do.	do.
Meat Pies (lbs.)	...	...	...	330	do.	do.
Rabbits (lbs.)	...	...	...	50	do.	do.
Frozen Egg Whites (lbs.)	...	...	...	42	do.	do.
Tinned Spiced Ham (lbs.)	...	...	...	30	do.	do.
Tinned Jellyed Veal (lbs.)	...	...	...	6	do.	do.
Tinned Ox Tongue (lbs.)	...	...	...	18	do.	do.
Tinned Fruit, Vegetables, Fish, etc.	...	...	...	1069	do.	do.
Artificial Cream (lbs.)	...	...	...	84	do.	do.
Butter (lbs.)	...	...	...	7	do.	do.
Jellies (lbs.)	...	...	...	45	do.	do.
Cakes (lbs.)	...	...	...	40	do.	do.
Seminola (lbs.)	...	...	...	21	do.	do.
Macaroni (lbs.)	...	...	...	8	do.	do.
Potatoes (lbs.)	...	...	...	6720	do.	do.
10 boxes Plaice (lbs.)	...	...	...	190	do.	do.
30 boxes Cod (lbs.)	...	...	...	490	do.	do.
1 box Haddock (lbs.)	...	...	...	14	do.	do.
2 boxes Lemon Soles (lbs.)	...	...	...	28	do.	do.
4 boxes Mixed Fish (lbs.)	...	...	...	56	do.	do.

Total estimated weight of food condemned:—**63 tons, 5 cwts., 2 qrs.**

* **Note.**—Included under these headings were 54 "Casualty" beasts and 20 sent in for slaughter under the Tuberculosis Order.

PREVALENCE OF AND CONTROL OVER INFECTIOUS AND OTHER DISEASES.

The notifications of infectious diseases during the 52 weeks ended 28th December, 1940, were as follows:—Scarlet Fever, 91; Cerebro-spinal Fever, 48; Whooping Cough, 97; Measles, 816; Diphtheria, 213; Pneumonia, 69; Erysipelas, 12; Puerperal Pyrexia, 17; Enteric Fever, 1.

The notifications of infectious disease per 1,000 population are as follows:—

	England and Wales.	Smaller Towns.	Chester.
Enteric	0.07	0.10	0.02
Cerebro-spinal Fever ...	0.32	0.29	1.02
Scarlet Fever	1.63	1.57	1.93
Whooping Cough	1.34	1.35	2.06
Diphtheria	1.16	1.21	4.53
Erysipelas	0.33	0.30	0.25
Measles	10.24	9.99	17.37
Pneumonia	1.20	1.00	1.46
Puerperal Pyrexia (per 1,000 total births) ...	11.96	9.73	22.04

There was a widespread epidemic of Measles during the year, and towards the latter part of the year Whooping Cough became more prevalent. Diphtheria notifications increased from 1939 and were widespread throughout the town. It was interesting to find 44 of the 213 notifications in adults. 27 cases were notified from the Royal Infirmary, 21 being inhabitants of other areas, many of whom had throat or nose swabs taken on admission to the Infirmary and were found to have diphtheria bacilli present. Swabbing of contacts in the home, in schools, and in factories was carried out to find the sources of infection. Anti-toxin for necessitous cases is now available at the Pathological Department, Royal Infirmary, Chester, where throat swabs may be left day or night for examination.

IMMUNISATION AGAINST DIPHTHERIA.

Our campaign was carried on during the year 1940, and 960 school children and 39 pre-school children were immunised during the year. The Chester scheme commenced in 1930 and at the end of 1940 6,534 children have been immunised and 552 children primarily schick tested and found negative, at total of 7,086 presumed immune children. In addition, a number of children have been immunised by private practitioners, but I have no record of the number. During the years 1930 to 1940 inclusive, cases of diphtheria in Chester numbered 940, with 71 deaths. During the same period cases of diphtheria in

immunised children numbered 17, two severe, the remainder moderate to very mild. Not one of these cases died.

These figures need no comment as to the efficacy of individual protection. To ensure mass protection and thus reduce the incidence of diphtheria a higher percentage of the child population must be immunised.

BLIND PERSONS ACT, 1920.

The care of the blind in Chester has been delegated to the Chester and District Blind Welfare Society. The Local Authority contributes a sum towards the administration expenses of the Society and is represented on the management.

There were 91 cases on the register at the end of the year. Eight licences were issued for wireless sets to blind people.

The health visitors paid 248 visits to blind persons during the year.

OPHTHALMIA NEONATORUM.

Three cases were notified during the year. In one case the vision was unimpaired. In the remaining cases the patients were removed from the district. .

PUBLIC HEALTH ACT, 1925, SECTION 66.

A scheme under this section was approved by the Ministry of Health in 1937.

TUBERCULOSIS, 1940.

Particulars of new cases of tuberculosis and mortality during 1940 are given below.

Age Periods			NEW CASES.				DEATHS.			
			Respiratory		Non-Respiratory		Respiratory.		Non Respiratory.	
			Males	Females	Males	Females	Males	Females	Males	Females
0—	...	...	0	0	0	0	0	0	0	0
1—	...	...	1	0	4	1	1	0	1	0
5—	...	...	0	1	4	0	0	1	0	0
15—	...	...	7	7	2	2	2	3	2	1
25—	...	...	9	1	0	0	1	0	0	1
35—	...	...	3	4	2	2	3	2	0	0
45—	...	...	1	1	0	0	4	2	0	0
55—	...	...	5	0	0	0	1	1	0	0
65 and upwards...			0	0	0	0	2	0	0	0
Totals	...		26	14	12	4	14	9	3	2

Two deaths occurred during the year in non-notified cases.

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925.

There has been no occasion to act on this regulation.

CLEANSING AND DISINFECTATION OF VERMINOUS PERSONS AND THEIR BELONGINGS.

A shampoo station is freely used for the cleansing of heads of school children. In cases of body vermin, which are fortunately few, they are treated at the Disinfecting Station at the Isolation Hospital, where clothes and bedding are also treated. Occasionally we are asked to deal with an adult, who is dealt with in a similar fashion.

CANCER.

Facilities for the diagnosis and treatment of Cancer are available at the Chester Royal Infirmary which is equipped with Radium Deep X-Ray Therapy and Endo-diathermy supplied by the Cheshire and North Wales Group Executive of the British Empire Cancer Campaign.

The Radium Department was opened in 1930 and Dr. Ralston Paterson of the Christie Hospital and Holt Radium Institute, Manchester, acts as consultant.

Cases of cancer are sent from the City and surrounding areas. Beds are available for in-patient treatment in the Royal Infirmary.

City cases can be admitted to the City Hospital administered by the Local Authority, but only operative treatment can be undertaken and if Radium or Deep X-Ray Therapy is necessary, cases may be transferred for treatment in the Royal Infirmary.

Deaths from Cancer in 1940:—

0—1 year	—	—
5—15 years	—	—
15—45 years	5	5
45—65 years	14	18
65 years and over	20	21
Totals	39	44

CAUSES OF, AND AGES AT DEATH DURING 1940.

Causes of death.	Net deaths of "residents", whether occurring within or without the district.						
	At all Ages	Under 1 year	1-5 years	5-15 years	15-45 years	45-65 years	65 years or over
1 Typhoid and paratyphoid fevers	0	0	0	0	0	0	0
2 Cerebro-spinal fever	6	3	1	0	2	0	0
3 Scarlet fever	0	0	0	0	0	0	0
4 Whooping cough	2	0	2	0	0	0	0
5 Diphtheria	16	1	5	4	0	0	0
6 Tuberculosis of respiratory system	24	0	0	1	12	9	2
7 Other forms of tuberculosis	7	0	2	0	4	0	1
8 Syphilitic diseases	4	0	0	0	1	2	1
9 Influenza	13	0	1	0	3	4	5
10 Measles	5	1	4	0	0	0	0
11 Acute polio myelitis and polio encephalitis	0	0	0	0	0	0	0
12 Acute infectious encephalitis	3	0	0	0	0	3	0
13 Cancer of buccal cavity (male) & uterus (female)	17	0	0	0	0	5	12
14 Cancer of stomach and duodenum	15	0	0	0	1	4	10
15 Cancer of breast	14	0	0	0	2	7	5
16 Cancer of all other sites ...	37	0	0	0	7	16	14
17 Diabetes	6	0	0	1	0	1	4
18 Intra cranial vascular lesions	55	0	0	0	1	11	43
19 Heart disease	157	0	0	0	10	41	106
20 Other diseases of circulatory system	7	0	0	0	0	2	5
21 Bronchitis	61	3	2	0	1	16	39
22 Pneumonia	50	9	10	2	5	7	17
23 Other respiratory diseases ...	26	0	0	0	6	10	10
24 Ulcer of stomach and duodenum	6	0	0	0	2	4	0
25 Diarrhoea under 2 years ...	4	1	3	0	0	0	0
26 Appendicitis	4	0	1	1	1	0	1
27 Other digestive diseases ...	13	1	0	0	0	6	6
28 Nephritis	13	0	0	0	2	4	7
29 Puerperal and post abortive sepsis	0	0	0	0	0	0	0
30 Other maternal causes	0	0	0	0	0	0	0
31 Premature birth	13	13	0	0	0	0	0
32 Congenital malformations with infantile disease ...	11	9	1	1	0	0	0
33 Suicide	4	0	0	0	2	1	1
34 Road traffic accidents	10	0	0	0	3	3	4
35 Other violent causes	21	1	2	0	5	3	10
36 All other causes	63	3	1	1	4	11	43
	681	48	32	11	72	172	346

Vital Statistics of Whole District during 1940 and previous years.

YEAR	Population estimated to Middle of each Year	BIRTHS		TOTAL DEATHS REGISTERED IN THE DISTRICT		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT				
		Un- corrected Number	Nett	Number †	Rate	Of Non- residents registered in the District	Of Resi- dents not registered in the District	Under 1 Year of Age		At all Ages		
								Number †	Rate per 1000 Nett Births	Number †	Rate	
1	2	3	4	5	6	7	8	9	10	11	12	13
1929	40,920	805	707	17.25	089	10.83	211	148	55	77.7	026	14.3
1930	40,910	798	667	16.3	616	15.5	172	141	48	71.96	585	13.60
1931	41,380	799	671	16.11	595	14.37	196	147	46	68.5	546	12.47
1932	41,350	804	686	16.5	592	14.31	205	150	37	53.9	537	12.98
1933	41,070	698	590	14.4	606	14.7	200	136	40	67.7	542	13.19
1934	40,800	795	654	16.0	613	15.0	248	172	47	71.8	533	13.06
1935	40,500	672	567	14.0	621	15.3	252	183	43	75.8	552	13.6
1936	45,131	852	663	15.1	754	17.1	267	73	34	51.3	600	13.9
1937	44,610	882	656	14.7	845	18.9	248	37	39	59.6	634	14.7
1938	44,360	667	644	14.5	813	18.3	237	25	48	74.3	601	14.0
1939	44,280 (B.R.) 45,090 (I.M.)	1031	728	15.6	828	16.1	217	40	54	77.3	611	13.8
1940	46,060	1000	733	15.7	022	10.6	289	48	48	6.7	081	15.2

* Total deaths occurring in Chester whether of residents or non-residents.

† Births and deaths corrected for those births and deaths properly belonging to Chester, but occurring outside the District, or occurring in the District but properly belong outside.

Area of District in acres (land and inland water), 4,142
No. of inhabited houses, 14,468.

